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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,775	04/08/2008	Ingo Speier	PH010527US3 (TIR069)	6032
78823	7590	09/08/2009		
Philips Intellectual Property and Standards P.O. Box 3001 Briarcliff Manor, NY 10510-8001			EXAMINER SPINELLA, KEVIN	
			ART UNIT 2885	PAPER NUMBER
			MAIL DATE 09/08/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,775	<b>Applicant(s)</b> SPEIER, INGO	
	<b>Examiner</b> KEVIN SPINELLA	<b>Art Unit</b> 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006 and 08 April 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/23/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 8/23/2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 930, 940. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claim 7 is objected to because there is no space between “claim” and “1”.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Blume et al. (US Publication No.: 2004/0062040 A1, hereafter Blume).

In regard to Claim 1, Blume discloses a lighting module (Title, Figure 1) comprising: two or more (Figure 2) light-emitting elements 1 (paragraph 29, lines 2-3) for generating light having one or more colors (paragraph 36, lines 6-8), said two or more light-emitting elements 1 positioned into a closely packed array (Figure 1, Figure 2); a primary optical system 4, 22, 23 (paragraph 31, line 1; paragraph 36, lines 10-13) optically connected (Figure 3) with the two or more light-emitting elements 1, said primary optical system 4, 22, 23 providing a means for light extraction (Figure 3) from the two or more light-emitting elements 1; and a secondary optical system 5, 27 (paragraph 31, line 2; paragraph 38) optically connected (Figure 3) with the primary optical system 4, 22, 23, said secondary optical system 5, 27 for mixing (i.e. reflector 5

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operationally required to provide mixing) and collimating (paragraph 38, i.e. polarization constitutes collimating) the light extracted from the two or more light-emitting elements

1. Note also the reflector surface 24 reflects light in a parallel or collimated manner.

In regard to Claim 2, Blume discloses each of the two or more light-emitting elements 1 emit light having a color selected from the group comprising red, blue, green, amber and white (paragraph 36, lines 6-8).

In regard to Claims 3-5, Blume discloses the two or more light-emitting elements 1 have a longest dimension (Figure 2), and spacing between the two or more light-emitting elements 1 is less than twice the longest dimension (Figure 2), is less than the longest dimension (Figure 2), and is less than half of the longest dimension (Figure 2).

In regard to Claim 6, Blume discloses the primary optical system 4, 22, 23 includes an optical element 4, 22, 23, wherein said optical element 4, 22, 23 is configured as a refractive element 4, 23 or reflective element 22.

In regard to Claim 7, Blume discloses the primary optical system 4, 22, 23 is formed from an encapsulation material (Figure 3, paragraph 36, lines 10-13).

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In regard to Claim 8, Blume discloses the encapsulation material (Figure 3, paragraph 36, lines 10-13) is textured (Figure 3, i.e. surface of lens 4 or reflector 22 surface 24 is operationally required to have a certain texture).

In regard to Claim 9, Blume discloses the primary optical system 4, 22, 23 further comprises an encapsulation material 23 (paragraph 36, lines 12-13) positioned between (Figure 3) the two more light-emitting elements 1 and the optical element 4

In regard to Claim 10, Blume discloses the primary optical system 4, 22, 23 comprises a dome (Figure 3) lens 4 enclosing (Figure 3) the two or more light-emitting elements 1.

In regard to Claim 11, Blume discloses the secondary optical system 5, 27 includes an optical element 5, 27, wherein said optical element 5, 27 is configured as a refractive element 27 or a reflective element 5.

In regard to Claim 12, Blume discloses the secondary optical system 5, 27 includes a light pipe or a light guide 5 (i.e. layer 27 is operationally required to guide light).

In regard to Claim 13, Blume discloses the secondary optical system 5, 27 comprises a reflective element 5 having reflective wall surfaces 6 (Figure 1, paragraph

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31, lines 1-2) and a perpendicular cross section (Figure 2) and an axial cross section (Figure 1).

In regard to Claim 14, Blume discloses the perpendicular cross section (Figure 2) is square (Figure 2).

In regard to Claim 15, Blume discloses the reflective element 5 has a symmetric (Figure 1) axial cross sectional shape (Figure 1).

In regard to Claim 16, Blume discloses the axial cross sectional shape (Figure 1) flares or tapers (Figure 1, i.e. reflectors 5 taper) at an exit aperture (Figure 1) of the reflective element 5.

In regard to Claim 17, Blume discloses the axial cross sectional shape (Figure 1) is straight (Figure 1) and segmented (Figure 1, i.e. plurality of reflector 5 segments).

In regard to Claim 18, Blume discloses the reflective element 5 has a length (Figure 1) and the secondary optical system 5, 27 further comprises a diffusive optical element 10 (paragraph 31, line 6, i.e. scatter constitute diffusing) positioned along the length (Figure 1).

In regard to Claim 19, Blume discloses the primary optical system 4, 22, 23 and the secondary optical system 5, 27 are integrally formed (Figure 3).

In regard to Claim 20, Blume discloses a tertiary optical system 10 optically coupled to the secondary optical system 5, 27, the tertiary optical system 10 for shaping a beam (paragraph 31, line 6) of the mixed and collimated light extracted from the two or more light-emitting elements 1.

In regard to Claim 21, Blume discloses the tertiary optical system 10 comprises an optical element 10 configured as a diffusive element (paragraph 31, line 6).

In regard to Claim 22, Blume discloses the tertiary optical system 10 and the secondary optical system 5, 27 are configured for mating interconnection (Figure 1, Figure 3).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN SPINELLA whose telephone number is (571) 270-1284. The examiner can normally be reached on Monday - Friday, from 7:30 a.m. to 5:00 p.m. EST.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone



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number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KJS

9/1/2009

/Anabel M Ton/

Primary Examiner, Art Unit 2875